

**Translation**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>40cdh/229159</b>	<b>FOR FURTHER ACTION</b>	See Form PCT/IPEA/416
International application No. <b>PCT/EP2004/000335</b>	International filing date (day/month/year) <b>17.01.2004</b>	Priority date (day/month/year) <b>11.03.2003</b>
International Patent Classification (IPC) or national classification and IPC		
Applicant <b>HYDAC TECHNOLOGY GMBH</b>		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. ☐ (sent to the applicant and to the International Bureau) a total of \_\_\_\_\_ sheets, as follows:

☐ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) \_\_\_\_\_, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability, citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

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Box No. I

Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-8 \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- nos. 1-10 \_\_\_\_\_ as originally filed/furnished
- nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the drawings:
- sheets 1/2-2/2 \_\_\_\_\_ as originally filed/furnished
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims		YES
	Claims	1, 2, 9, 10	NO
Inventive step (IS)	Claims		YES
	Claims	1-10	NO
Industrial applicability (IA)	Claims	1-10	YES
	Claims		NO

## 2. Citations and explanations (Rule 70.7)

1 This report makes reference to the following documents:

D1: DE 195 39 551 A (BOLENZ & SCHAEFER; SIEMENS AG (DE)) 17 April 1997 (1997-04-17)  
D2: US 4 608 870 A (HUBER WERNER ET AL) 2 September 1986 (1986-09-02)  
D3: PATENT ABSTRACTS OF JAPAN Vol. 1999, No. 10, 31 August 1999 (1999-08-31) & JP 11 132204 A (TAIYO LTD), 18 May 1999 (1999-05-18)  
D4: PATENT ABSTRACTS OF JAPAN Vol. 2000, No. 20, 10 July 2001 (2001-07-10) & JP 2001 082416 A (TAIYO LTD), 27 March 2001 (2001-03-27)  
D5: EP 0 721 067 A (BEETZ HYDRAULIK GMBH) 10 July 1996 (1996-07-10)

2 INDEPENDENT CLAIM 1

2.1 The present application does not meet the requirements of PCT Article 33(1) because the subject matter of claim 1 lacks novelty (PCT Article 33(2)).

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
	<p>Document D1 discloses (the references between parentheses refer to that document):</p> <p>piston-type accumulator that comprises: an accumulator housing in the form of a cylindrical tube (1) made from magnetisable material, which defines an axial direction of the housing, a piston (6), which can be axially displaced over a stroke path in the cylindrical tube (1) and which forms a movable separating element which separates two working chambers (2, 7) within the accumulator housing, a magnet arrangement (11) which is disposed on the piston (6) and generates a field on the wall of the cylindrical tube (1), and a magnetic field sensor device which is located on the outside of the cylindrical tube (1) and comprises at least one Hall sensor (12) which is disposed on the outside of the cylindrical tube (1) and responds to the field generated by the magnet arrangement (11) on the piston (6) in order to determine the position of the piston (6) along the stroke path.</p> <p>2.2. Document D2 (see, in particular, column 1, line 61 - column 3, line 6, figure 1) also discloses a device having the features of claim 1.</p> <p>3 DEPENDENT CLAIMS 2-10</p> <p>3.1. Dependent claims 2-10 do not appear to contain any additional features which, in combination with the features of any claim to which they refer back,</p>

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	<p>meet the PCT requirements for novelty and inventive step. The reasons are as follows:</p> <p>3.2. Regarding claims 2, 9 and 10: the subject matter of claims 2, 9 and 10 lacks novelty (PCT Article 33(2)): see document D2, in particular column 1, line 61 - column 3, line 6, figure 1.</p> <p>3.3. Regarding claims 3 - 8: the subject matter of claims 3 - 8 does not involve an inventive step (PCT Article 33(3)):</p> <p>3.3.1. Regarding claims 3 and 8: see document D3, in particular the abstract and the drawings.</p> <p>3.3.2. Regarding claims 4 and 5: see document D4, in particular the abstract and the drawings.</p> <p>3.3.3. Regarding claim 6: see document D5, in particular column 4, lines 29-40, figure 1.</p> <p>3.3.4. Regarding claim 7: dependent claim 7 concerns a minor structural modification to the device according to claim 6, of the kind that a person skilled in the art routinely makes on the basis of familiar considerations, especially since the resulting advantages are readily foreseeable.</p> <p>3.4. Documents D3 to D5 describe the same advantages as the present application in relation to the features indicated in sections 3.3.1. to 3.3.4. A person skilled in the art would therefore regard</p>

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	<p>the inclusion of these features in the device described in D1 as a common measure for solving the problem of interest.</p>
4.	<p>INDUSTRIAL APPLICABILITY</p> <p>The subject matter of claims 1-10 can be made and used and is therefore considered industrially applicable.</p>